

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-12 (canceled).

13. (New) A layer system, comprising:

a silicon layer;

a passivating layer at least regionally and superficially deposited on the silicon layer, wherein the passivating layer has a substantially inorganic first partial layer and a substantially polymer second partial layer.

14. (New) The layer system as recited in claim 13, wherein the first partial layer is substantially made of an oxide layer.

15. (New) The layer system as recited in claim 14, wherein the first partial layer has a thickness of 1 nm to 100 nm.

16. (New) The layer system as recited in claim 14, wherein the first partial layer is deposited one of directly on the silicon layer and on a further layer made of silicon oxide situated on the silicon layer.

17. (New) The layer system as recited in claim 15, wherein the second partial layer is substantially made of one of a Teflon® layer and a Teflon®-like layer.

18. (New) The layer system as recited in claim 16, wherein the second partial layer is substantially made of one of a Teflon® layer and a Teflon®-like layer.

19. (New) The layer system as recited in claim 17, wherein the second partial layer has a thickness of 30 nm to 800 nm.

20. (New) The layer system as recited in claim 18, wherein the second partial layer has a thickness of 30 nm to 800 nm.

21. (New) The layer system as recited in claim 15, wherein the passivating layer is a layer protecting the silicon layer against an etch attack by a gaseous halogen fluoride.

22. (New) The layer system as recited in claim 16, wherein the passivating layer is a layer protecting the silicon layer against an etch attack by a gaseous halogen fluoride.

23. (New) The layer system as recited in claim 15, wherein the passivating layer is free of at least one of microscale and nanoscale channels that are pervious to a gaseous halogen fluoride.

24. (New) The layer system as recited in claim 16, wherein the passivating layer is free of at least one of microscale and nanoscale channels that are pervious to a gaseous halogen fluoride.

25. (New) The layer system as recited in claim 14, wherein, within the passivating layer, at least regionally an intermediate layer situated between the first partial layer and the second partial layer and adjoining both the first and second partial layers is provided, wherein the intermediate layer has a composition such that in a surface area of the intermediate layer adjoining the first partial layer, the intermediate layer has a composition at least approximately similar to the first partial layer, and in a surface area of the intermediate layer adjoining the second partial layer, the intermediate layer has a composition at least approximately similar to the second partial layer, and wherein the intermediate layer transitions, one of continuously and in steps, from the composition at least approximately similar to the first partial layer to the composition at least approximately similar to the second partial layer.

26. (New) The layer system as recited in claim 25, wherein the intermediate layer contains silicon, oxygen, carbon and fluorine.

27. (New) The layer system as recited in claim 15, wherein, within the passivating layer, at least regionally an intermediate layer situated between the first partial layer and the second partial layer and adjoining both the first and second partial layers is provided, wherein the intermediate layer has a composition such that in a surface area of the intermediate layer adjoining the first partial layer, the intermediate layer has a composition at least approximately similar to the first partial layer, and in a surface area of the intermediate layer adjoining the second partial layer, the intermediate layer has a composition at least approximately similar to the second partial layer, and wherein the intermediate layer transitions, one of continuously and in steps, from the composition at least approximately similar to the first partial layer to the composition at least approximately similar to the second partial layer.

28. (New) The layer system as recited in claim 27, wherein the intermediate layer contains silicon, oxygen, carbon and fluorine.

29. (New) A method for producing a passivating layer on a silicon layer, comprising:
providing a substantially inorganic first partial layer at least regionally on a silicon layer:

providing an intermediate layer at least regionally on the first partial layer; and
providing a substantially polymer second partial layer at least regionally on the intermediate layer to form a passivating layer;

wherein the intermediate layer has a composition such that in a surface area of the intermediate layer adjoining the first partial layer, the intermediate layer has a composition at least approximately similar to the first partial layer, and in a surface area of the intermediate layer adjoining the second partial layer, the intermediate layer has a composition at least approximately similar to the second partial layer, and wherein the intermediate layer transitions, one of continuously and in steps, from the composition at least approximately similar to the first partial layer to the composition at least approximately similar to the second partial layer.

30. (New) The method as recited in claim 29, wherein the method is incorporated in the production of one of largely and regionally self-supporting structures in silicon using a temporary application of an anisotropic etching technique in silicon and a temporary application of an isotropic etching technique in silicon.